

B33

# PATENT ABSTRACTS OF JAPAN

(11) Publication number : 09-031453  
(43) Date of publication of application : 04. 02. 1997

(51) Int. CI. C09K 9/02  
G03C 1/73  
// B01J 13/16

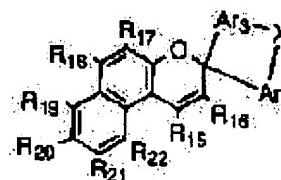
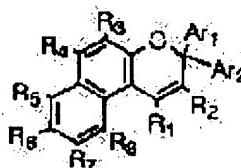
(21) Application number : 07-181574 (71) Applicant : FUJI PHOTO FILM CO LTD  
(22) Date of filing : 18. 07. 1995 (72) Inventor : SATOMURA MASATO  
SANO MASAJIRO  
HAYASHI TAKAYUKI  
TANAKA MITSUGI  
AOONO TOSHIAKI

(54) MICROCAPSULE AND ELEMENT USING THE SAME

(57) Abstract:

**PROBLEM TO BE SOLVED:** To obtain a microcapsule, containing a photochromic compound and a high-boiling solvent, having a specific average particle diameter and a high speed of response, excellent in transparency, color development density and repetitive developing and decoloring resistances and useful for dimming, displaying, etc.

SOLUTION: This microcapsule is obtained by including  
 (A) a photochromic compound such as a compound of  
 formula I [R1 to R8 are each a halogen, a  
 (substituted) alkyl, a (substituted) aryl, a  
 (substituted) alkoxy, etc.; Ar1 and Ar3 are each a  
 (condensed) aromatic ring] or a compound of formula II  
 [R15 to R22 are each R1; Ar3 and AP4 are each Ar1; X  
 is an atomic group required to form a 5-to an  
 8-membered (un)saturated ring comprising nonmetallic  
 atoms; and (B) a high-boiling solvent (e.g. a solvent  
 having 160-260° C boiling point), regulating the  
 particle diameter to  $\leq 2.0 \mu\text{m}$  and forming the wall from a synthetic polymer.



#### LEGAL STATUS

[Date of request for examination]